coM.sat

SMS Server

Installation and User-Guide
Version 1.58

www.comsat.de

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1. Overview

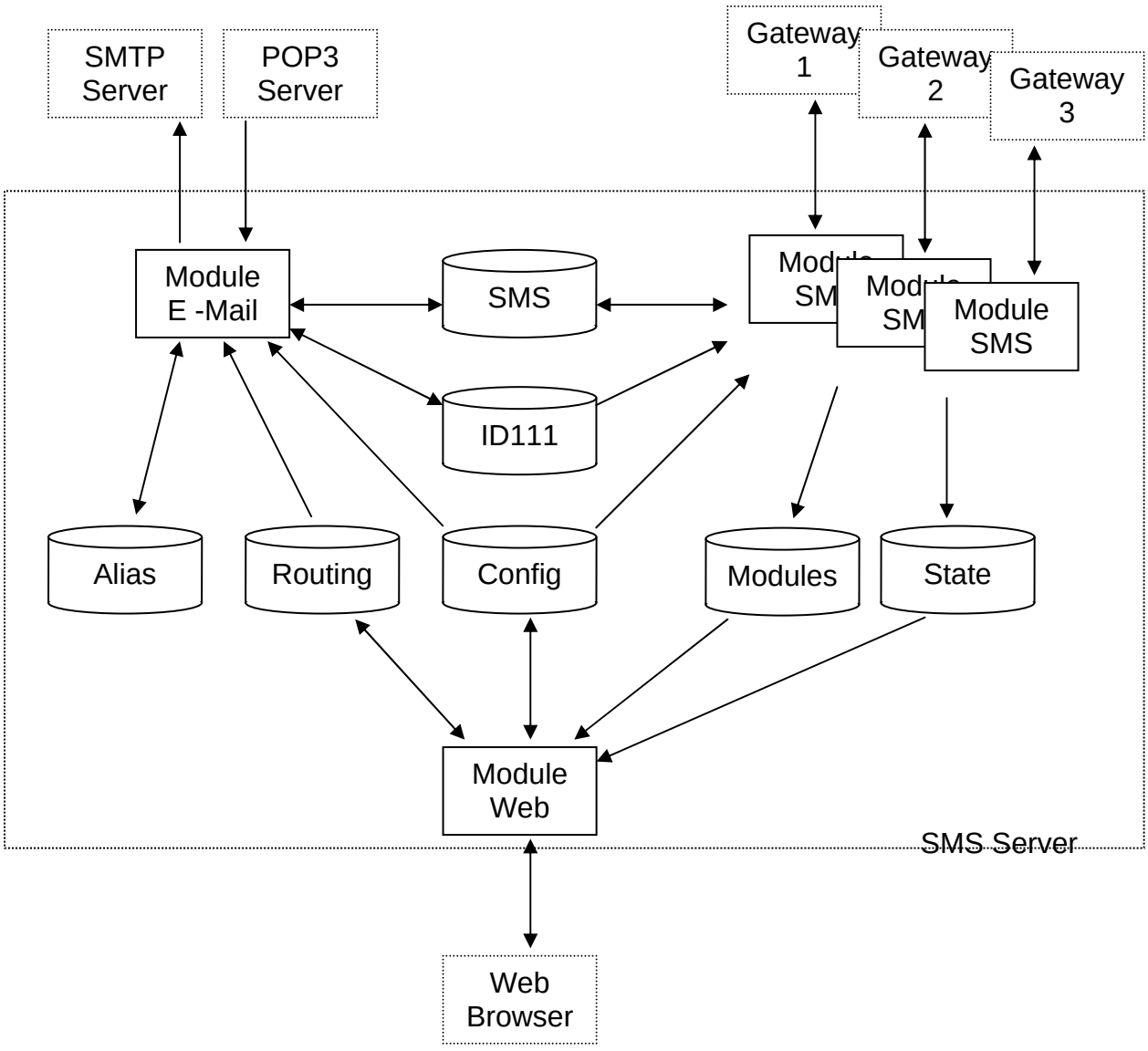
The coM.s.a.t. SMS Server consists of different modules connected by common databases.

Visualization and configuration is done by means of a web interface.

Every module is given an unique ID as command line parameter, so that a module can be started in different instances.

The flexible design allows the addition of modules to enhance the functionality without affecting the rest of the system.

1.1. Components



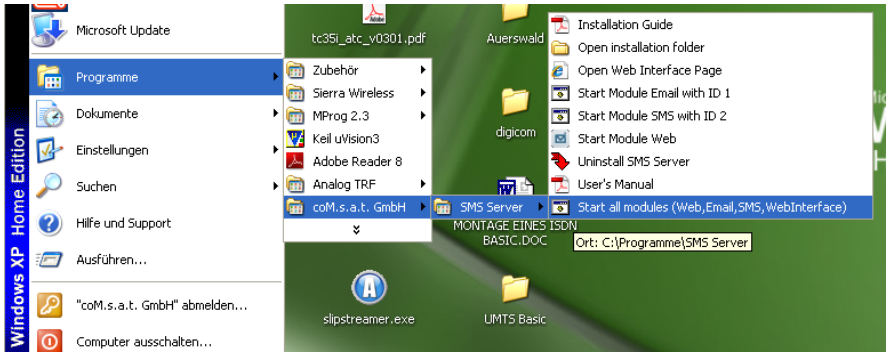
Modules	Function
Module Email	Interface to POP3/SMTP mail server
Module Sms	Interface to GSM Gateway. This module can be run in multiple instances, one for each connected GSM Gateway
Module Web	Interface to Intranet/Internet. Provides a HTTP server to allow configuration from an internet browser
Module Cdr (Integrated in Module Email	Generates CDR files from the database and archives old SMS
Module Bulk (Not yet ready)	Handles the sending of bulk SMS
Databases	**Function**
Sms.db3	Database that holds the SMS (sent and received). The last 100 SMS are shown on the *SMS List* web page
Config.db3	Configuration as shown on the *Configuration* web page. Holds a set of parameters for every module ID
Alias.db3	Holds the alias definitions as a combination of name, number(s) and the owner's e-mail address. Aliases are defined using mails to the SMS Server
Id111.bd3	Registration key database. Holds the registered IMEI numbers. To use a GSM module it's IMEI must be registered
modules.db3	The modules status as shown on the *Server Modules* web page
routing.db3	The assignment between number prefixes and networks as shown on the *Configuration* web page
state.db3	The status of the SMS gateways as shown on the *Gateway Status* and *Gateway Usage* web pages

1.2. Installation

Installation is done by starting SetupSmsServer121.exe (number can change according to the program version). Follow the advices in the installation program.

SMS Server V 1.55
coM.sat
Clevere Verbindungen
SMS Server V 1.55
SMS - Server
Publisher: coM.s.a.t. GmbH
Web site: http://www.comsat.de
Email address: support@comsat.de
Telephone: 0180 5 633343
Tarma Installer will lead you through the steps required to install or upgrade SMS Server V 1.55 on your computer.
To continue, click Next.
Copyright (c) 2005-2008 coM.s.a.t. GmbH
This program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, is a violation of applicable laws.
About...
< Back
Next >
Cancel

The installation program installs the following entries in the windows start menu:



Open installation folder

This opens the folder where the SMS Server was installed to.

Open Web Interface Page

Opens the start page of the web interface in the standard browser. Make sure to start the web server (ModuleWeb) before.

Start all modules (Web,Email,Sms)

Starts the modules Web (Web Server), Email (with ID 1) and SMS (with ID 2). This is done from the batch file "Start SmsServer.bat" in the installation folder. If you add more modules (for further gateways) you can edit the file.
Example: To start an instance of the module SMS with ID 3 add the line

```
Start ModuleSms -i3
```

Start Module Email with ID 1

This starts only the module Email with the ID 1

Start Module SMS with ID 2

This starts only the module SMS with the ID 2

Start Module Web

This starts only the web server module

Uninstal SMS Server

To uninstall the SMS Server. There might stay some files with user data after installation. To remove these go to the installation folder and delete them manually.

Installaiton Guide

This document in PDF format.

User's Manual

Shows the user's manual in PDF format.

2. Web Interface

Select from the Windows Start menu

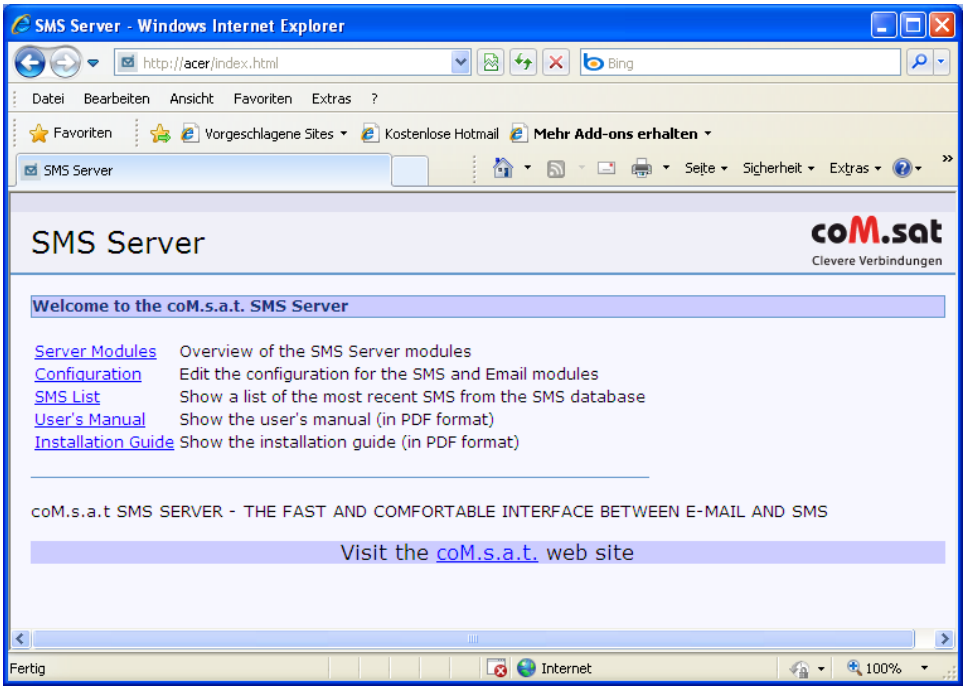
All Programs/coM.s.a.t/SmsServer/Start Web Server

This starts the http server.
If you are running another web server on your machine you will get an error message that the port 80 is already in use. You must set another then, e.g. 8080.
Refer to the section

Then select from the windows start menu

All Programs/coM.s.a.t/SmsServer/Open Web Interface Page

The following web site should appear


SMS Server - Windows Internet Explorer
http://acer/index.html
Bing
Datei Bearbeiten Ansicht Favoriten Extras ?
Favoriten
Vorgeschlagene Sites
Kostenlose Hotmail
Mehr Add-ons erhalten
SMS Server
Seite
Sicherheit
Extras
SMS Server
coM.sat
Clevere Verbindungen
Welcome to the coM.s.a.t. SMS Server
Server Modules Overview of the SMS Server modules
Configuration Edit the configuration for the SMS and Email modules
SMS List Show a list of the most recent SMS from the SMS database
User's Manual Show the user's manual (in PDF format)
Installation Guide Show the installation guide (in PDF format)
coM.s.a.t SMS SERVER - THE FAST AND COMFORTABLE INTERFACE BETWEEN E-MAIL AND SMS
Visit the coM.s.a.t. web site
Fertig
Internet
100%

If you want to access the web page from another computer in the network, type explicitely the address or name of the computer where the Web module is running, e.g.

192.168.1.33

or

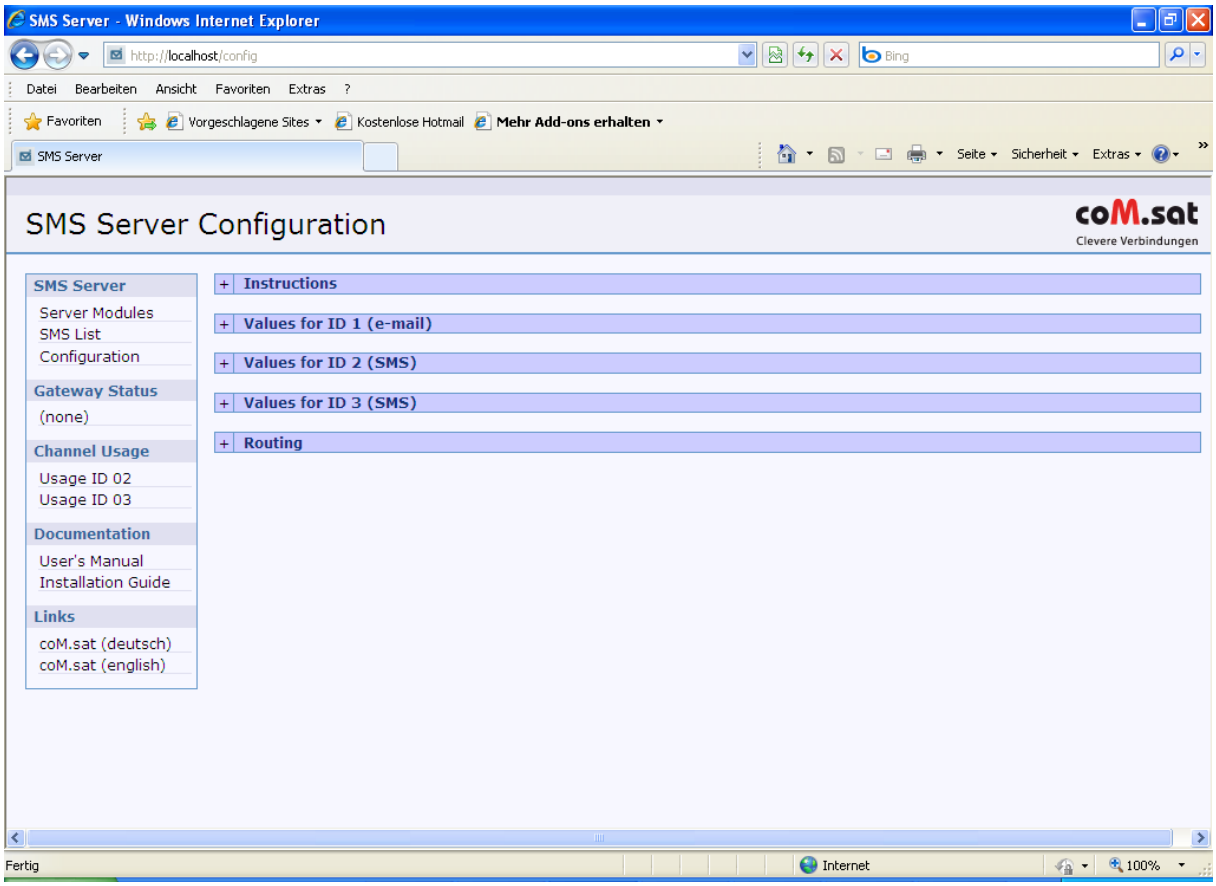
SmsServer

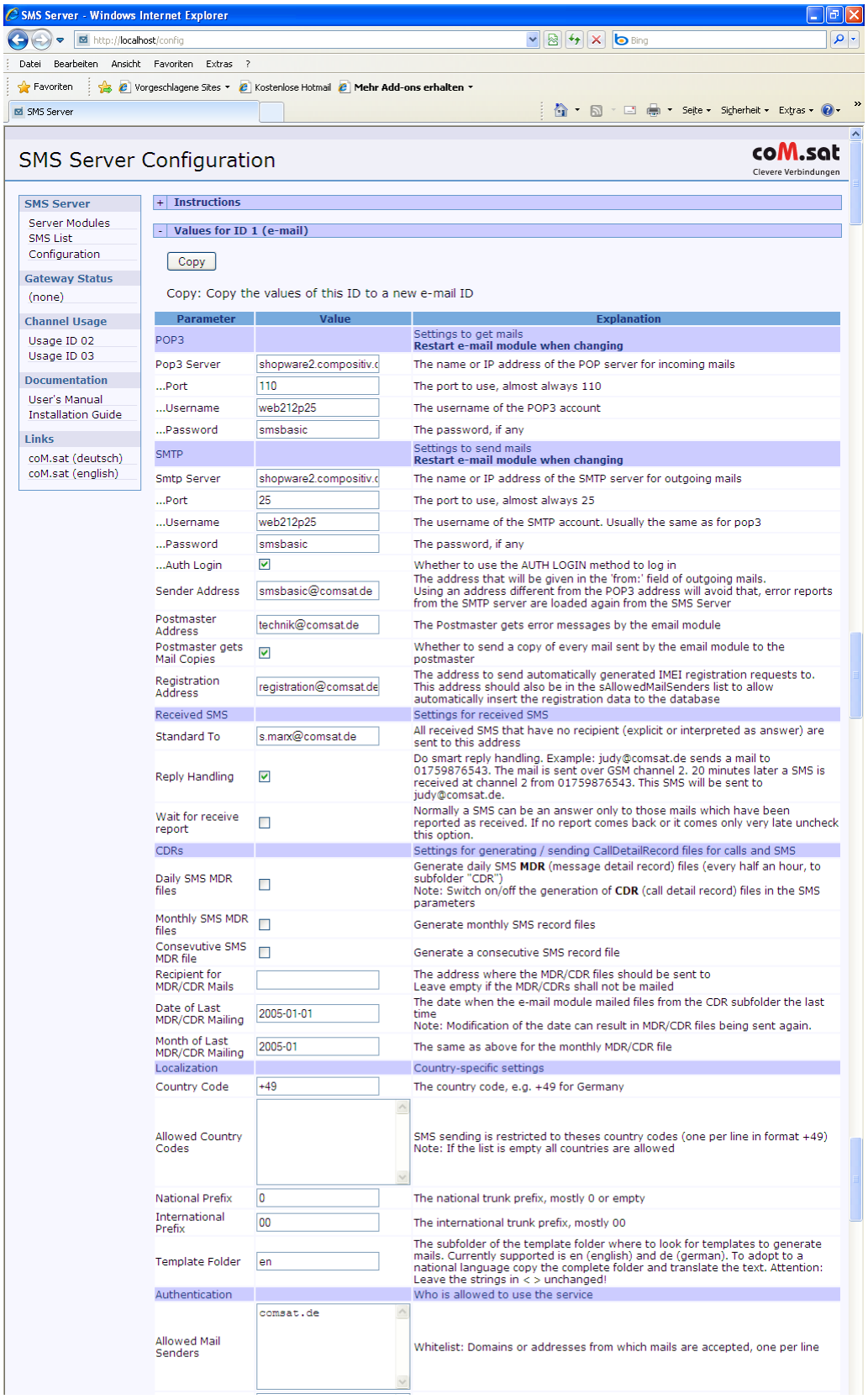
3. Configuration

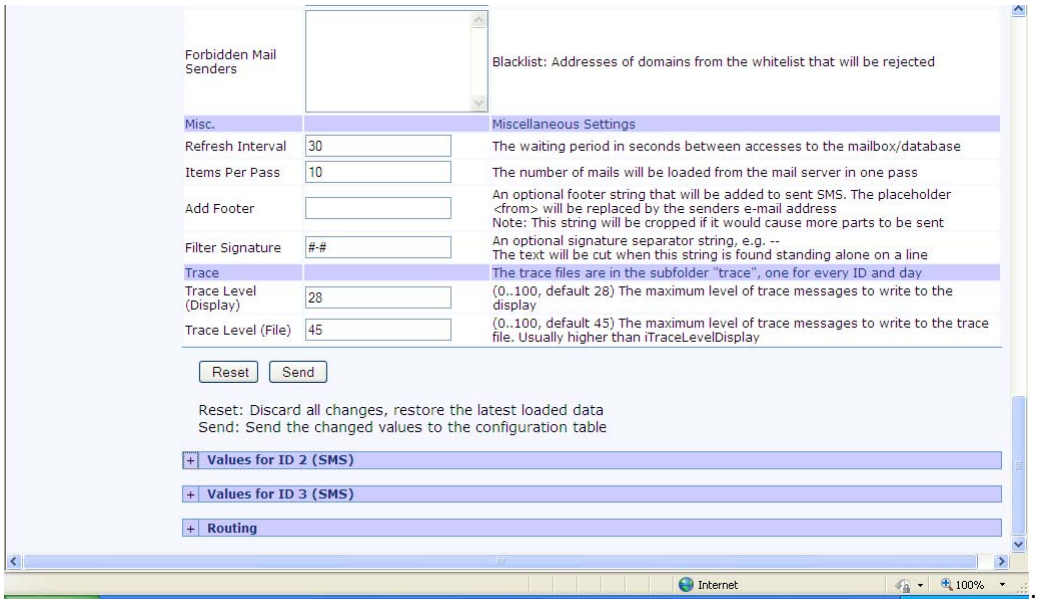
Select from the start page "Configuration" or enter directly in the address line of your browser

localhost/config

Now you can see the current configuration in your web browser:




SMS Server - Windows Internet Explorer
http://localhost/config
Datei Bearbeiten Ansicht Favoriten Extras ?
Favoriten Vorgeschlagene Sites Kostenlose Hotmail Mehr Add-ons erhalten
SMS Server
Seite Sicherheit Extras
SMS Server Configuration
coM.sat
Clevere Verbindungen
SMS Server
Server Modules
SMS List
Configuration
Gateway Status
(none)
Channel Usage
Usage ID 02
Usage ID 03
Documentation
User's Manual
Installation Guide
Links
coM.sat (deutsch)
coM.sat (english)
+ Instructions
- Values for ID 1 (e-mail)
Copy
Copy: Copy the values of this ID to a new e-mail ID
Parameter
Value
Explanation
POP3
Settings to get mails
Restart e-mail module when changing
Pop3 Server
shopware2.compositiv.c
The name or IP address of the POP server for incoming mails
...Port
110
The port to use, almost always 110
...Username
web212p25
The username of the POP3 account
...Password
smsbasic
The password, if any
SMTP
Settings to send mails
Restart e-mail module when changing
Smtp Server
shopware2.compositiv.c
The name or IP address of the SMTP server for outgoing mails
...Port
25
The port to use, almost always 25
...Username
web212p25
The username of the SMTP account. Usually the same as for pop3
...Password
smsbasic
The password, if any
...Auth Login
Whether to use the AUTH LOGIN method to log in
Sender Address
smsbasic@comsat.de
The address that will be given in the 'from:' field of outgoing mails.
Using an address different from the POP3 address will avoid that, error reports from the SMTP server are loaded again from the SMS Server
Postmaster Address
technik@comsat.de
The Postmaster gets error messages by the email module
Postmaster gets Mail Copies
Whether to send a copy of every mail sent by the email module to the postmaster
Registration Address
registration@comsat.de
The address to send automatically generated IMEI registration requests to.
This address should also be in the sAllowedMailSenders list to allow automatically insert the registration data to the database
Received SMS
Settings for received SMS
Standard To
s.marx@comsat.de
All received SMS that have no recipient (explicit or interpreted as answer) are sent to this address
Reply Handling
Do smart reply handling. Example: judy@comsat.de sends a mail to 01759876543. The mail is sent over GSM channel 2. 20 minutes later a SMS is received at channel 2 from 01759876543. This SMS will be sent to judy@comsat.de.
Wait for receive report
Normally a SMS can be an answer only to those mails which have been reported as received. If no report comes back or it comes only very late uncheck this option.
CDRs
Settings for generating / sending CallDetailRecord files for calls and SMS
Daily SMS MDR files
Generate daily SMS MDR (message detail record) files (every half an hour, to subfolder "CDR")
Note: Switch on/off the generation of CDR (call detail record) files in the SMS parameters
Monthly SMS MDR files
Generate monthly SMS record files
Consevutive SMS MDR file
Generate a consecutive SMS record file
Recipient for MDR/CDR Mails
The address where the MDR/CDR files should be sent to
Leave empty if the MDR/CDRs shall not be mailed
Date of Last MDR/CDR Mailing
2005-01-01
The date when the e-mail module mailed files from the CDR subfolder the last time
Note: Modification of the date can result in MDR/CDR files being sent again.
Month of Last MDR/CDR Mailing
2005-01
The same as above for the monthly MDR/CDR file
Localization
Country-specific settings
Country Code
+49
The country code, e.g. +49 for Germany
Allowed Country Codes
SMS sending is restricted to theses country codes (one per line in format +49)
Note: If the list is empty all countries are allowed
National Prefix
0
The national trunk prefix, mostly 0 or empty
International Prefix
00
The international trunk prefix, mostly 00
Template Folder
en
The subfolder of the template folder where to look for templates to generate mails. Currently supported is en (english) and de (german). To adopt to a national language copy the complete folder and translate the text. Attention: Leave the strings in < > unchanged!
Authentication
Who is allowed to use the service
Allowed Mail Senders
comsat.de
Whitelist: Domains or addresses from which mails are accepted, one per line


Forbidden Mail Senders
Blacklist: Addresses of domains from the whitelist that will be rejected
Misc.
Miscellaneous Settings
Refresh Interval
30
The waiting period in seconds between accesses to the mailbox/database
Items Per Pass
10
The number of mails will be loaded from the mail server in one pass
Add Footer
An optional footer string that will be added to sent SMS. The placeholder <from> will be replaced by the senders e-mail address
Note: This string will be cropped if it would cause more parts to be sent
Filter Signature
#-#
An optional signature separator string, e.g. --
The text will be cut when this string is found standing alone on a line
Trace
The trace files are in the subfolder "trace", one for every ID and day
Trace Level (Display)
28
(0..100, default 28) The maximum level of trace messages to write to the display
Trace Level (File)
45
(0..100, default 45) The maximum level of trace messages to write to the trace file. Usually higher than iTraceLevelDisplay
Reset
Send
Reset: Discard all changes, restore the latest loaded data
Send: Send the changed values to the configuration table
Values for ID 2 (SMS)
Values for ID 3 (SMS)
Routing
Internet
100%
...

Make all changes, then click to one of the "Send" buttons. A click to the "Reset" button resets all settings in the form as long as you did not send them.

The modules remark the change of the configuration after a short while (given by the current value of iRefreshInterval in seconds).

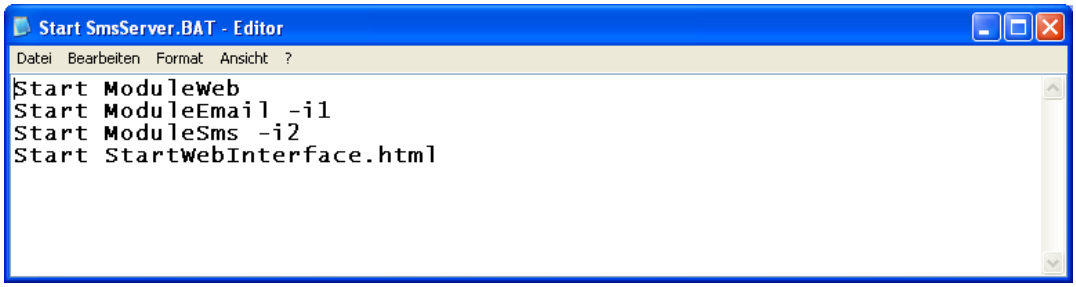
Adding a module instance

If you want to run more than one instance of one of the modules (normally of the SMS module) make a copy of an existing parameter set by clicking to the respective "Copy" button. This creates a new parameter set and gives it an ID that is one higher than the highest existing ID.

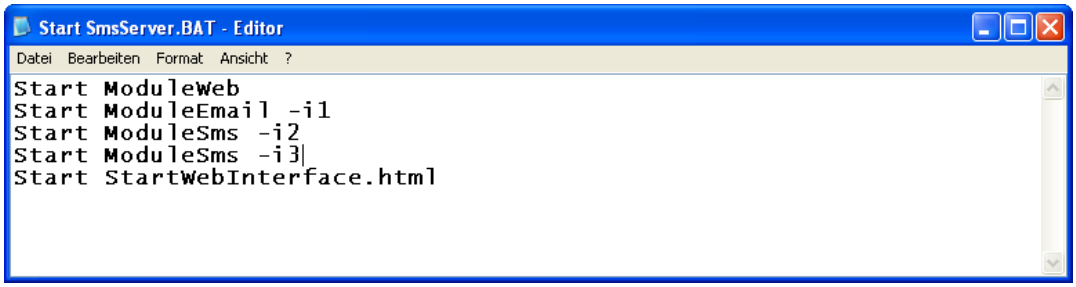
In addition you have to actually start the module with the new ID as parameter. The best way for that is to edit the file

Start SmsServer.bat

in the installation directory. (You can open the installation directory from the start menu.)



To start a new instance for the SMS module with ID 3 add the following entry:



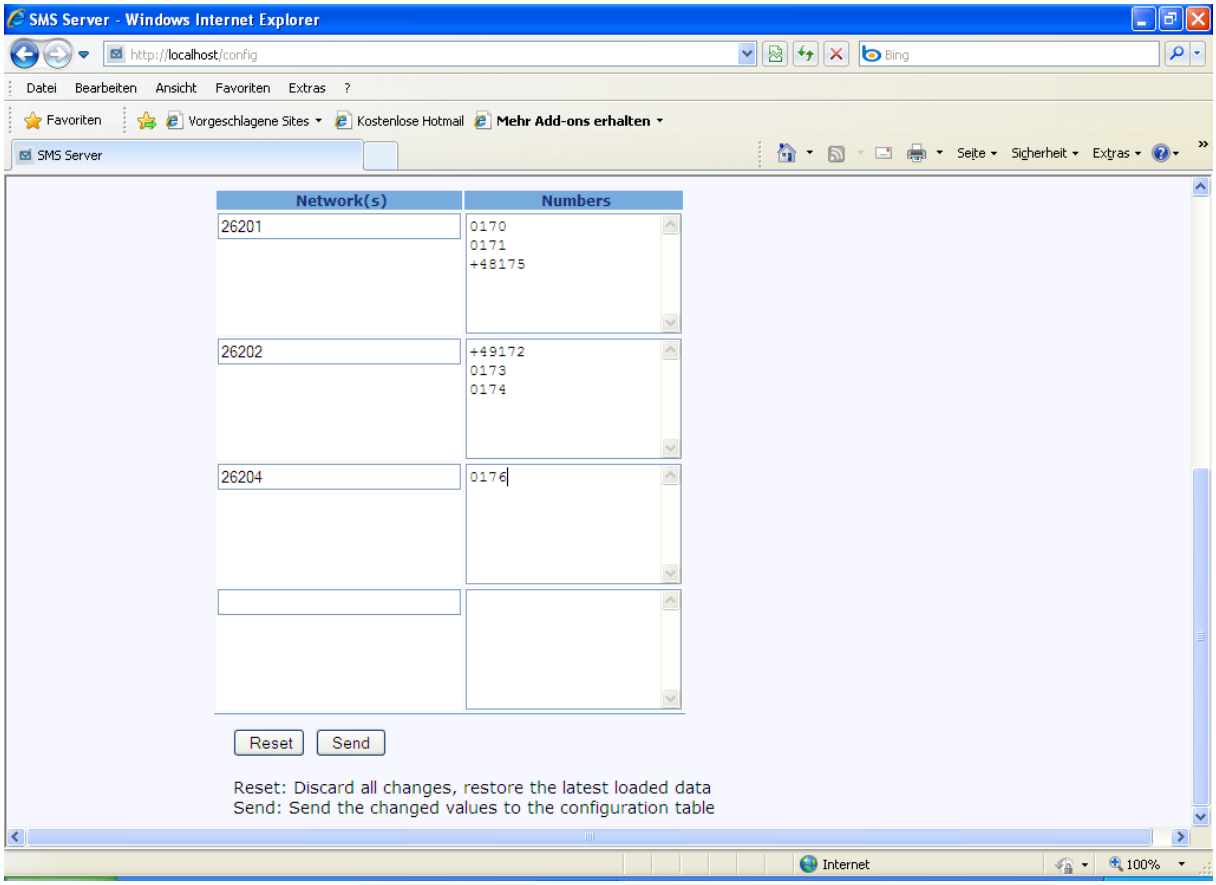
Removing a module instance

Every parameter with ID > 2 can be deleted by clicking to the respective "Delete" button. The parameter sets for ID 1 (e-mail) and 2 (SMS) can not be deleted.

Note: After deleting a parameter you may have to remove also the respective entry in the file Start SmsServer.bat

Routing

At the end of the configuration page you find the routing table. Here you can make assignments between network PLMNs and number prefixes. The longest match decides which network will be taken. If two networks have the same entry, both networks will be allowed for this entry.



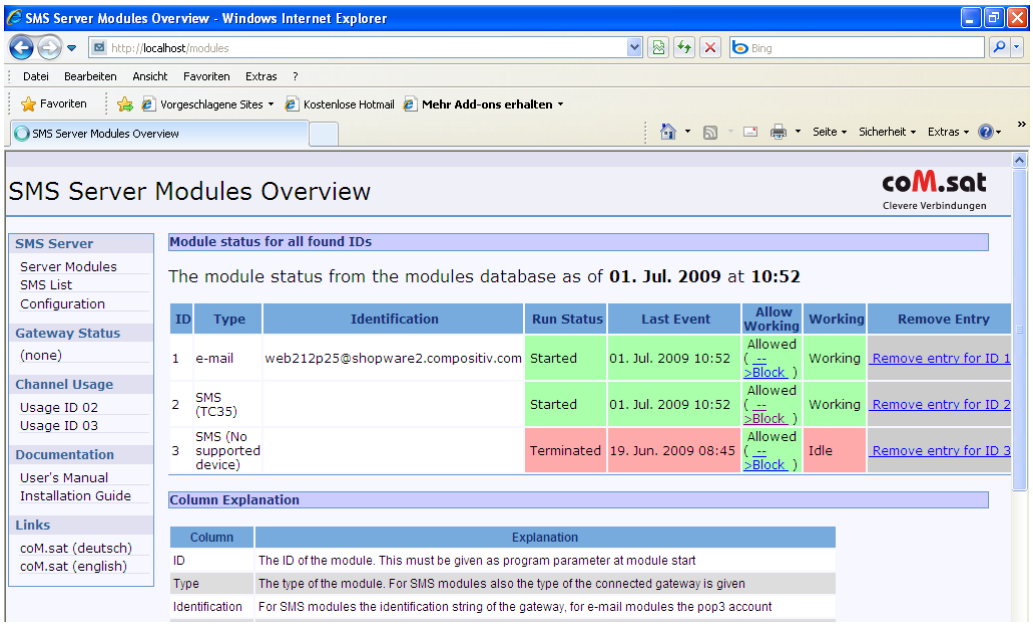
The routing table is evaluated by the Email module. The localization section of the Email module parameters will be used to translate the numbers between the possible representations (e.g. 0174 and +49174 is equal for Germany).

4. Server Modules Overview

Select from the start page or the menu "Server Modules" or enter directly in the address line of your browser

localhost/modules

You well get a list of all modules that are running or have been running.



Parallel use of SMS Server and Configuration Software

When you want to access one of the gateways with the respective configuration software the serial port must be released by the SMS module.

This is done by clicking to "--> Block" and waiting until the "Working" state goes to "Idle". You can then start the configuration software.

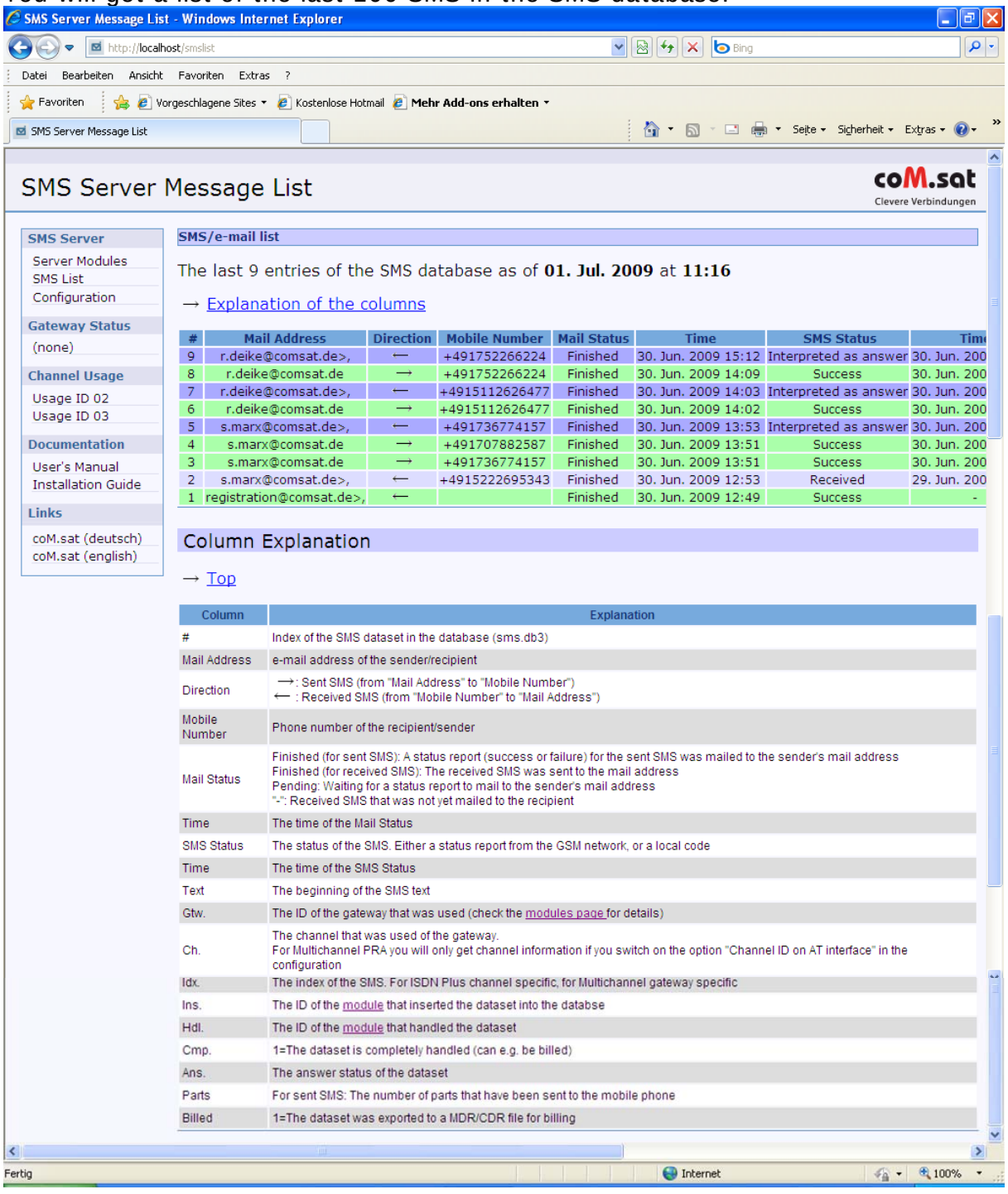
When you finished the configuration close the configuration program and click to "--> Allow" to let the SMS module resume it's work.

5. SMS List

Select from the start page or the menu "SMS List" or enter directly in the address line of your browser

localhost/smslist

You will get a list of the last 100 SMS in the SMS database.


SMS Server Message List - Windows Internet Explorer
http://localhost/smslist
SMS Server Message List
coM.sat
Clevere Verbindungen
SMS Server
Server Modules
SMS List
Configuration
Gateway Status
(none)
Channel Usage
Usage ID 02
Usage ID 03
Documentation
User's Manual
Installation Guide
Links
coM.sat (deutsch)
coM.sat (english)
SMS/e-mail list
The last 9 entries of the SMS database as of 01. Jul. 2009 at 11:16
→ Explanation of the columns
| Mail Address | Direction | Mobile Number | Mail Status | Time | SMS Status | Time
9 | r.deike@comsat.de>, | ⟵ | +491752266224 | Finished | 30. Jun. 2009 15:12 | Interpreted as answer | 30. Jun. 200
8 | r.deike@comsat.de | ⟶ | +491752266224 | Finished | 30. Jun. 2009 14:09 | Success | 30. Jun. 200
7 | r.deike@comsat.de>, | ⟵ | +4915112626477 | Finished | 30. Jun. 2009 14:03 | Interpreted as answer | 30. Jun. 200
6 | r.deike@comsat.de | ⟶ | +4915112626477 | Finished | 30. Jun. 2009 14:02 | Success | 30. Jun. 200
5 | s.marx@comsat.de>, | ⟵ | +491736774157 | Finished | 30. Jun. 2009 13:53 | Interpreted as answer | 30. Jun. 200
4 | s.marx@comsat.de | ⟶ | +491707882587 | Finished | 30. Jun. 2009 13:51 | Success | 30. Jun. 200
3 | s.marx@comsat.de | ⟶ | +491736774157 | Finished | 30. Jun. 2009 13:51 | Success | 30. Jun. 200
2 | s.marx@comsat.de>, | ⟵ | +4915222695343 | Finished | 30. Jun. 2009 12:53 | Received | 29. Jun. 200
1 | registration@comsat.de>, | ⟵ | | Finished | 30. Jun. 2009 12:49 | Success | -
Column Explanation
→ Top
Column | Explanation
| Index of the SMS dataset in the database (sms.db3)
Mail Address | e-mail address of the sender/recipient
Direction | ⟶: Sent SMS (from "Mail Address" to "Mobile Number") ⟵ : Received SMS (from "Mobile Number" to "Mail Address")
Mobile Number | Phone number of the recipient/sender
Mail Status | Finished (for sent SMS): A status report (success or failure) for the sent SMS was mailed to the sender's mail address Finished (for received SMS): The received SMS was sent to the mail address Pending: Waiting for a status report to mail to the sender's mail address "-": Received SMS that was not yet mailed to the recipient
Time | The time of the Mail Status
SMS Status | The status of the SMS. Either a status report from the GSM network, or a local code
Time | The time of the SMS Status
Text | The beginning of the SMS text
Gtw. | The ID of the gateway that was used (check the modules page for details)
Ch. | The channel that was used of the gateway. For Multichannel PRA you will only get channel information if you switch on the option "Channel ID on AT interface" in the configuration
Idx. | The index of the SMS. For ISDN Plus channel specific, for Multichannel gateway specific
Ins. | The ID of the module that inserted the dataset into the databse
Hdl. | The ID of the module that handled the dataset
Cmp. | 1=The dataset is completely handled (can e.g. be billed)
Ans. | The answer status of the dataset
Parts | For sent SMS: The number of parts that have been sent to the mobile phone
Billed | 1=The dataset was exported to a MDR/CDR file for billing
Fertig
Internet
100%

Here you can check the status of the most recent SMS sent and received. To get an explanation of the columns just click to the respective link.

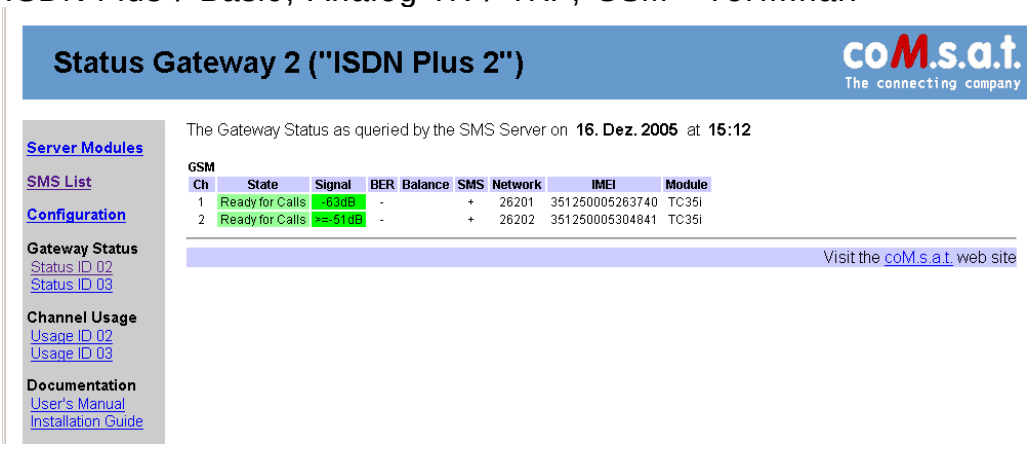
6. Gateway Status / Channel Usage

Select from the menu "Status ID xx" with xx being the ID of an SMS module. You will get a display of the status of the respective gateway.

Note: The status page is generated from the SMS module. It is only refreshed when the respective module is working.

The display differs for ISDN Plus and Multichannel PRA.

ISDN Plus / Basic; Analog TR / TRF; GSM - Terminal:



Status Gateway 2 ("ISDN Plus 2")

coM.s.a.t. The connecting company

Server Modules
SMS List
Configuration
Gateway Status
Status ID 02
Status ID 03
Channel Usage
Usage ID 02
Usage ID 03
Documentation
User's Manual
Installation Guide

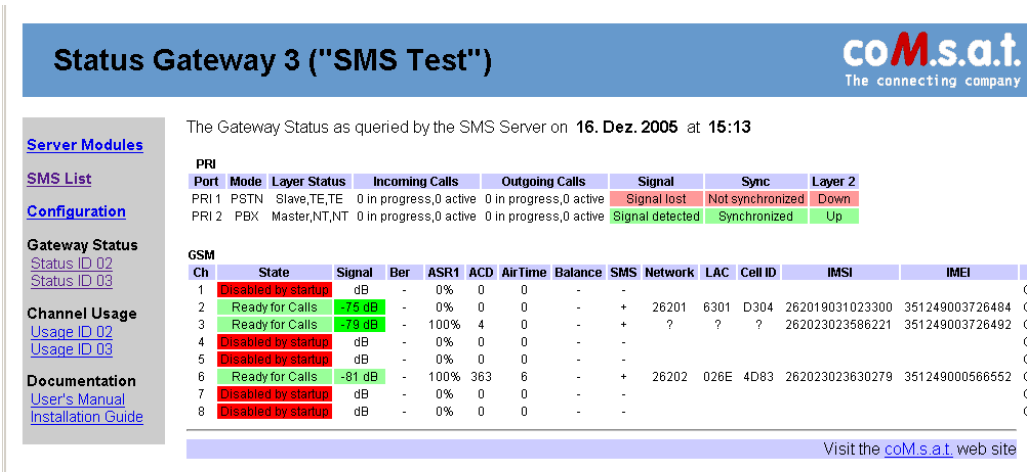
The Gateway Status as queried by the SMS Server on **16. Dez. 2005** at **15:12**

GSM

Ch	State	Signal	BER	Balance	SMS	Network	IMEI	Module
1	Ready for Calls	-63dB	-		+	26201	351250005263740	TC35i
2	Ready for Calls	=>-51dB	-		+	26202	351250005304841	TC35i

Visit the coM.s.a.t. web site

Multichannel PRA:



Status Gateway 3 ("SMS Test")

coM.s.a.t. The connecting company

Server Modules
SMS List
Configuration
Gateway Status
Status ID 02
Status ID 03
Channel Usage
Usage ID 02
Usage ID 03
Documentation
User's Manual
Installation Guide

The Gateway Status as queried by the SMS Server on **16. Dez. 2005** at **15:13**

PRI

Port	Mode	Layer Status	Incoming Calls	Outgoing Calls	Signal	Sync	Layer 2
PRI 1	PSTN	Slave,TE,TE	0 in progress,0 active	0 in progress,0 active	Signal lost	Not synchronized	Down
PRI 2	PBX	Master,NT,NT	0 in progress,0 active	0 in progress,0 active	Signal detected	Synchronized	Up

GSM

Ch	State	Signal	Ber	ASR1	ACD	AirTime	Balance	SMS	Network	LAC	Cell ID	IMSI	IMEI
1	Disabled by startup	dB	-	0%	0	0	-	-					
2	Ready for Calls	-75 dB	-	0%	0	0	-	+	26201	6301	D304	262019031023300	351249003726484
3	Ready for Calls	-79 dB	-	100%	4	0	-	+	?	?	?	262023023586221	351249003726492
4	Disabled by startup	dB	-	0%	0	0	-	-					
5	Disabled by startup	dB	-	0%	0	0	-	-					
6	Ready for Calls	-81 dB	-	100%	363	6	-	+	26202	026E	4D83	262023023630279	351249000566552
7	Disabled by startup	dB	-	0%	0	0	-	-					
8	Disabled by startup	dB	-	0%	0	0	-	-					

Visit the coM.s.a.t. web site

Every time the status is loaded, the SMS module checks the current state of the channels. The number of installed channels and the number of active channels are written to the database "state.db3", grouped for each network (and for Multichannel PRA also for the PRI ports).

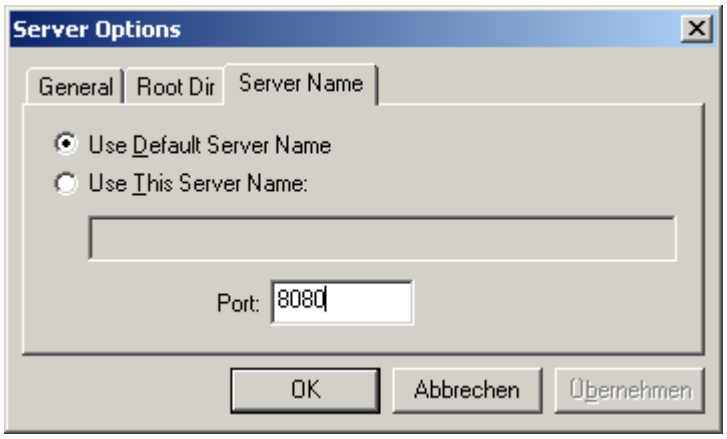
Selecting from the menu "Usage ID xx" you can show grafics for the channel usage during the current day, grouped by GSM networks, and PRI ports, respectively.

7. Appenix

Changing the port for the web server

This must be done, when port 80 is already in use by another http server

Open the window of the ModuleWeb and go to the menu "Server"/"Properties"



Enter the desired port number, e.g. 8080 and click to OK

Go to the menu "File"/"Save" and save to "default.hsc" in the installation folder of the SMS Server.